

## **Remarks**

Claims 30 – 58 remain pending in the application. For reasons as stated below, it is submitted that the claims are in condition for allowance.

### **Claim Rejections – 35 USC 103**

#### **Claims 30, 34, 36 – 45, 49, and 51- 58**

Claims 30, 34, 36 – 45, 49, and 51- 58 have been rejected under 35 USC 103(a) as being unpatentable over Elson et al. (U.S. Patent Application Publication No. 2003/0014521) (hereinafter “Elson”) in view of Gehrmann (WIP IPN WO 01/31836) (hereinafter “Gehrmann”). This rejection is respectfully traversed.

As discussed in the response to the previous Office Action, in the present invention a wireless network allows the “imprinting” of domain member devices by the sharing of a group key and identities of other domain member devices. (*See, e.g.,* pages 20-21 of the original application, and specifically paragraphs [0077] and [0078] of the publication of the subject application, U.S. Patent Application Publication No. 2006/0179303 A1). Any domain member device can use the group key, as opposed to a laborious storage of “trust keys” for all of the other nodes, and the identity of any other domain member device to establish a bilateral, secure communication to that device without the need to refer to an administrator means.

For example, independent claim 30 recites, *inter alia*, a network including a device having administration means for allowing selected devices to be associated within a domain including at least three of said devices by providing each device in the domain

with identification data, the identification data including security data for identifying each device as a member of the domain and device identity data corresponding to each member of the domain, said device identity data being required to allow each device in the domain to establish secure communications directly with each other device within the domain.

Elson is directed to an in-vehicle telematics network with a “throw-away” extension that acts as a proxy to other devices (paragraph [0077]), where one device is permanently the “administrator,” with all requests for access to other networked devices needing to be directed through the administrator, in essentially a hub-and-spoke arrangement.

It is acknowledged in the Office Action that “Elson does not expressly teach” the aforementioned features of independent claim 30.

Nonetheless, it is alleged in the Office Action that “Gehrman discloses: the network including a device (e.g., X-Node) having administration means for allowing selected devices to be associated within a domain including at least three of said devices by providing each device in the domain with identification data (to provide the capability to adapt one domain device with identification data [pg. 5, lines 5-15; pg. 4, lines 4-8]), the identification data (e.g., public key certificate) including security data for identifying each device as a member of the domain and device identity data corresponding to each member of the domain, said device identity data being required to allow each device in the domain to establish secure communication directly with each other device within the domain (to provide the capability to send all the trusted (e.g., identification data) with the

trusted group (e.g., domain) for purpose of establishing a communication [pg. 7, lines 15-25].” Additionally, it is alleged in the Office Action that a person having ordinary skill in the art at the time of the invention would have “recognized the desirability and advantage of modifying Elson by employing the well known features of transmitting device public key certificate for purpose of joining a trusted group disclosed above by Gehrmann, for which packet virus scanning will be enhanced [pg. 7, lines 15-25].” These contentions are respectfully traversed.

Gehrmann relates to an ad hoc communication network and a method for establishing security in an ad hoc network (page 1, lines 6-8). However, neither in the passage cited in the Office Action nor elsewhere does Gehrmann contain a teaching or suggestion of an administration means providing each device in the domain with “security data for identifying each device as a member of the domain and device identity data corresponding to each member of the domain,” as recited in independent claim 30. The “X-node” described on page 5, lines 5-15 and on page 7, lines 15-25, “sends a signed message [the “first X-node message”] comprising all the trusted keys [e.g., public key certificates] of the nodes 103-105 within the trust group 102 to the candidate node 101, and signs the public key of the candidate node 101 and sends a message [the “second X-node message”] comprising the key together with the signature to all the other nodes 104, 105 within the trust group 102.” However, the “X-node messages” cannot be equated to the “security data for identifying each device as a member of the domain (i.e., a group key)” because neither the “first X-node message” nor the “second X-node message” contain a group key or “security data for identifying each device as a member of the

domain.” At best, the “first X-node message” contains a “bundle” of trusted keys of the nodes that are already within the trust group, but even this “bundle” of trusted keys does not equate to the “security data” recited in independent claim 30 because it does not identify the candidate node, and, therefore, is not “security data for identifying each device as a member of the domain.”

Accordingly, without conceding the propriety of the asserted combination, the asserted combination of Elson and Gehrman is deficient, even in view of the knowledge of one of ordinary skill in the art.

Further, with respect to the contention that a person of ordinary skill in the art at the time of the invention would have modified Elson with the feature of transmitting device public key certificates for the purpose of joining a trusted group, as disclosed by Gehrman, such a modification would require a change in the hub-and-spoke model of Elson to the ad hoc model of Gehrman, effectively requiring a change in the principle of operation of Elson. Under the circumstances, it is respectfully submitted that only with the benefit of hindsight would a person having only ordinary skill in the art be motivated to dispense with the hub-and-spoke model of Elson and choose to adopt an ad hoc model, and then further consider the teaching of Gehrman with its theoretical treatment of trust groups within ad hoc communication networks. Thus, notwithstanding the deficiencies of Gehrman discussed above, it is further submitted that a person of ordinary skill in the art at the time of the invention would not have modified Elson with the features of Gehrman, as suggested.

Claims 34 and 36-44 depend from independent claim 30. Accordingly, withdrawal of the rejection of claims 34 and 36-44 under 35 U.S.C. 103(a) as being unpatentable over Elson in view of Gehrmann is respectfully requested for at least the reasons discussed above with respect to the allowability of independent claim 30.

Independent claim 45 recites, *inter alia*, adapting one device within the domain to provide each other device in the domain with identification data, the identification data including security data for identifying each device as a member of the domain and device identity data corresponding to each member of the domain, said device identity data being required to allow each device in the domain to establish secure communications directly with each other device within the domain.

As discussed above with respect to independent claim 30, the asserted combination is deficient in teaching or suggesting “security data for identifying each device as a member of the domain and device identity data corresponding to each member of the domain,” and, further, a person of ordinary skill in the art at the time of the invention would not have modified Elson with the features of Gehrmann, as suggested. Accordingly, it is respectfully submitted that independent claim 45 is allowable for at least the reasons provided in support of the allowability of independent claim 30.

Claims 49 and 51-58 depend from independent claim 45. Accordingly, withdrawal of the rejection of claims 49 and 51-58 under 35 U.S.C. 103(a) as being unpatentable over Elson in view of Gehrmann is respectfully requested for at least the reasons discussed above.

**Claims 31 – 33, 35, 46 – 48 and 50**

Claims 31 – 33, 35, 46 – 48 and 50 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Elson in view of Gehrmann as applied to claims 30 and 45, and further in view of Morgan (U.S. Patent Application Publication No. 2003/0204738. This rejection is respectfully traversed.

It is respectfully submitted that Morgan does not add anything that would remedy the aforementioned deficiencies of the asserted combination of Elson and Gehrmann. Accordingly, favorable reconsideration and withdrawal of the rejection of claims 31 – 33, 35, 46 – 48 and 50 is respectfully requested.

**Conclusion**

In view of the foregoing, Applicants submit that the present application overcomes all prior rejections and has been placed in condition for allowance. Such action is respectfully requested.

Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to

contact the Applicants' undersigned representative at the address and telephone number indicated below.

Respectfully submitted,

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